STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

MARKETING OPPORTUNITIES FOR WILD KING SALMON

FINAL REPORT

State funds and in-kind contributions for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, US Department of Agriculture



Public Opinion and Marketing Research Sacramento, CA 916 440-8777 Jennifer D. Franz, Ph.D.

FOOD MARKETING & ECONOMICS GROUP

Davis, CA 530 753-1632 Shermain D. Hardesty, Ph.D.

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MARKETING OPPORTUNITIES FOR WILD KING SALMON

EXECUTIVE SUMMARY

INTRODUCTION

During the past 10 years, demand for troll-caught king salmon has been displaced by imported farmed salmon. In March 2000, the California Salmon Council (Salmon Council) contracted with JD Franz Research, Inc. to survey California salmon fishermen and salmon customers at all levels of the distribution stream—including US consumers. FOOD MARKETING & ECONOMICS GROUP served as a major subcontractor for this study. State funds and in-kind contributions for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, US Department of Agriculture.

The survey focussed on salmon customers' perceptions of different kinds of salmon and their salmon buying and marketing practices. Background information was reviewed and interviews were conducted with fishermen and trade customers: receivers; wholesalers and distributors; and seafood buyers for grocery stores and restaurants. Two focus groups with middle-income consumers in Northern and Southern California and 52 1-on-1 in-store interviews with upscale consumers in Northern California were also conducted. The findings were used to develop an overall marketing strategy for the Salmon Council, along with tactical recommendations. Only the major findings and recommendations are reported below.

FINDINGS AND RECOMMENDATIONS

US consumers are eating more salmon than ever. Per capita consumption of salmon has more than doubled during the past ten years, rising from .73 pounds in 1990 to 1.70 pounds by 1999. However, this growth is mostly attributable to farmed Atlantic salmon.

California's salmon fishermen are now offering fish that rivals Copper River salmon in quality. However, the year-round availability and consistent nature of farmed Atlantic salmon has made it the favored salmon with many wholesalers, grocery stores and restaurants. Although salmon is the favorite fish among California consumers, few are aware of California King salmon or know much about the fishery. Consequently, most grocers and restaurants have little reason to offer the product.

The Salmon Council must develop and promote a brand for California King salmon. Although Alaska's upcoming salmon marketing campaign will focus on the health benefits of salmon, the Salmon Council should not adopt this positioning; awareness of these benefits is already high among consumers. Instead, it should focus on raising consumer awareness of the differences in salmon and getting them to switch from farmed salmon to California King salmon during the season.

The Salmon Council must be careful not to make negative statements about farmed salmon. Instead, it must educate its target audience, primarily upscale and/or environmentally-conscious consumers, about the meaningful differences between California King salmon and farmed salmon.

Because the Salmon Council's budget is very limited, a "pull" strategy should be used to raise consumer awareness and interest in California salmon. Consumers must be inspired to request that their grocery stores and restaurants carry California King salmon. Since it will take several years to change the attitudes and buying habits of consumers and the trade, the program must be long-term and consistent.

The recommended program revolves around the following 3 strategic elements:

- Position California King Salmon as "wild"
- Focus on the target market
- Utilize partnerships with appropriate organizations

A. STRATEGIC ELEMENT #1—WILD POSITIONING

The need to differentiate California King Salmon from farmed Atlantic salmon is foremost. While 2 out of 3 upscale consumers were aware of wild salmon, awareness among middle-income consumers was minimal. However, they quickly developed a preference for it when salmon farming was described. Differentiation is essential to offset the "inconvenience" many wholesalers, grocers and restaurants associate with carrying California King salmon. The wild nature of California King salmon is currently perceived as a drawback by many grocers and restaurants. Instead, it must be turned into its biggest advantage; otherwise, the market for California King salmon will plummet as farmed Atlantic salmon supplies continue to grow.

Two components of the wild nature—wholesomeness and environmental soundness—need to be emphasized. The wholesomeness is attributable to how wild salmon feed and spawn. California salmon fishermen are an important element of this wild image; they are rugged small businesses, unlike multinational fish farms. They need to become charismatic spokespersons for their product, similar to small, organic farmers. This means communicating with consumers and chefs about the positives of the fishery.

The environmental soundness of California's King salmon fishery has been verified by the Monterey Bay Aquarium. The recent growth in the seasonal catch also attests to the rebuilding of fishery stocks. Consumers need to be educated regarding the soundness of management practices of the commercial California salmon fishery. Fishermen have made large sacrifices to rebuild and sustain the fishery, and they should proudly promote the beneficial outcomes.

- √ The Salmon Council should promote Wild California King Salmon as its brand.
 - The phrase, "Wild California King Salmon" must be displayed prominently on all of the Salmon Council's promotional materials. If possible, its website domain name should be changed to "wildcasalmon."
- ✓ The Salmon Council's logo should be redesigned to reflect the "wild" positioning.

The visual needs to be more stylized. The logo is a critical identifier of the brand. It needs to be revised before other elements of this proposed program are implemented.

✓ A broad-based public education program about the California King salmon fishery is essential.

A brochure about the California King salmon fishery should be developed and broadly distributed. It should include the following information: California King salmon's lifecycle, what they eat and how this affects the flesh color, spawning, season opening dates, the small business nature of the California salmon fishery, and how California salmon fishermen protect the sustainability of their fishery. The information should also emphasize the superiority of California King salmon—its freshness, firm texture and robust flavor. Seafood counters are an ideal location to distribute the brochure while consumers wait for their orders. This information should also be added to the Salmon Council's website.

B. STRATEGIC ELEMENT #2—FOCUS ON A TARGET MARKET

California King salmon must be marketed as an upscale product. Farmed Atlantic salmon is more attractive to price-sensitive consumers; it has been received very well by shoppers at Costco. The in-store interviews indicated that affluent, well-educated consumers are the target market for California King salmon. They tend to be the most food-oriented or environmentally conscious, and did not express much resistance towards paying a premium for wild salmon. Such consumers are more likely to live on the West and East Coasts. In the European market, the British and French appear to be the most environmentally conscious.

- ✓ Wholesalers, chefs and grocery buyers in targeted markets need to be reminded about the availability of California Kings. A database of wholesalers, chefs and grocery buyers should be developed.
 - These individuals should be mailed or FAXed simple flyers advising them about the season, suppliers and product availability, along with a brief reminder of the benefits. The updates should be monthly, starting 1 or 2 months before the beginning of the season and proceeding through the season.
- √ The Salmon Council needs to work with wholesalers to ensure that California King salmon is available during the season at grocery stores in affluent areas. The fact that consumers preferred California King salmon over Alaska King salmon and farmed salmon because of its freshness should be promoted to wholesalers and grocery fish buyers.

In Northern California, upscale stores such as Mollie Stone's, Whole Foods, Draeger's, Andronico's, Woodlands Market, Crystal Springs Fish Market and Lundardi's are favored locations for buying salmon. Their wholesalers should be supplied with brochures about the fishery to be distributed during deliveries.

√ The Salmon Council needs to promote its brand to white tablecloth restaurants. The Salmon Council should distribute its fishery brochure through supportive wholesalers and chef organizations (such as Chefs Collaborative). Customized metal gill tags, with the Salmon Council logo and fishing vessel name, would be ideal for promoting the "brand" to wholesalers and chefs, and distinguishing it from farmed salmon.

C. STRATEGIC ELMENT #3—PARTNERSHIPS

The Salmon Council can stretch its promotion efforts by partnering with appropriate organizations. The most obvious partnerships include specific grocery operations, restaurants, cooking academies, environmental organizations and fishing port tourism groups. These partnerships are win-win alliances. California King salmon has a wild, wholesome image to offer its partners.

- √ The Salmon Council can raise awareness of the differences between California King salmon and farmed salmon by capitalizing on its favorable review from the Monterey Bay Aquarium. It should seek reviews from the Audubon Society and other environmental organizations, such as the Natural Resources Defense Council, Marine Stewardship Council and SeaWeb. Chefs Collaborative and PCFFA are also developing "Good Fish" lists.
- √ Key grocery stores and restaurants that are committed to carrying California King salmon consistently during the season should be identified and requested to partner with the Salmon Council on "beginning of the season" promotions involving media publicity. They should be listed on the website and provided with brochures.
- ✓ The Salmon Council should seek support from related organizations to request opening more or all of the ports for the entire season

This change requires broad-based support. Currently, the southern port facilities are heavily impacted at the beginning of the season. The current regulatory structure creates gluts in the marketplace. It depresses prices because salmon is highly perishable and the fishermen have a limited number of delivery options. More marketing opportunities would raise prices while also reducing their volatility.

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INTRODUCTION

During the past 10 years, demand for troll-caught king salmon has been displaced by imported farmed salmon. In March 2000, the California Salmon Council (Salmon Council) contracted with JD Franz Research, Inc. to survey California salmon fishermen and salmon customers in the major channels of distribution—including US consumers. FOOD MARKETING & ECONOMICS GROUP served as a major subcontractor for this study. State funds for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, US Department of Agriculture.

The survey focused on salmon customers' perceptions of different kinds of salmon and their salmon buying and marketing practices. The information obtained from this survey has been used to develop a marketing strategy for Salmon Council and to recommend specific tactics for a marketing program. The Salmon Council's limited resources were taken into account in formulating these recommendations

OBJECTIVES

The survey of salmon fishermen and buyers was conducted to enable California's wild salmon fishermen to compete more effectively. The major objectives of the study are to:

- compare customers' perceptions of wild and farmed salmon;
- ✓ identify impediments in the industry infrastructure and in moving product through market channels;
- understand their buying and promotion practices; and
- identify niche marketing opportunities and develop marketing strategies and programs that will enable them to compete more effectively.

APPROACH

Since these objectives were so broad, the study was divided into 4 major research activities. They were:

♦	review background information from numerous publications and websites regarding:
	☐ fishery regulations,
	☐ historical conditions in the fishery,
	☐ Copper River promotion activities,
	☐ fish farming,
	□ sustainable fishing methods,
	☐ genetically modified salmon,
	☐ freezing salmon, and
	☐ USDA's proposed organic regulations.
•	interview at least 10 California salmon fishermen and at least 10 individuals from each of the major trade customer groups: ☐ first receivers, ☐ wholesaler, exporters and distributors, ☐ seafood buyers for grocery stores, and ☐ seafood buyers for restaurants.

- conduct 2 focus groups with middle income consumers in Northern and Southern California; and
- conduct one-on-one interviews with upscale consumers in Northern California.

In this report, the trade customers are referred to, in aggregate, as "customers" to distinguish them from consumers. Reports of the findings from the consumer focus groups and the one-on-one consumer interviews are attached, respectively, as Appendix A and Appendix B. The fishermen and customers interviewed are listed in Appendix C.

Findings from all of the interviews were integrated with the background information and analyzed in the next section. An overall marketing strategy is proposed in the subsequent section and elaborated with recommendations for action-oriented marketing programs to be used by the Salmon Council and individual fishermen.

FINDINGS

A. MARKET SITUATION

US consumers are eating more salmon than ever. Salmon is the third most popular seafood in the US, ranked behind tuna and shrimp. Per capita consumption of salmon in the US has more than doubled during the past ten years, rising from .73 pounds in 1990 to 1.70 pounds by 1999. However, most of this growth is attributable to farmed Atlantic salmon.

Between 1990 and 1998, US farmed salmon production increased from 6.6 million pounds to 46.2 million pounds. US salmon imports also rose dramatically, from 104.3 million pounds in 1990 to 265.5 million pounds in 1998. Most of the volume was fresh farmed Atlantic salmon. Although Norway is the world's largest producer of farmed Atlantic salmon with 44% of total production in 1998, Canada is the US' largest supplier, followed closely by Chile (Table 1). Canada exports mainly whole salmon while Chile is the dominant supplier of filleted salmon.

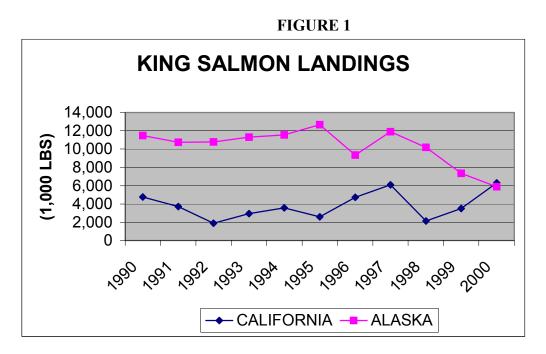
TABLE 1 FRESH FARMED ATLANTIC SALMON IMPORTS, 1999

	POUNDS IMPORTED BY COUNTRY					
	CANADA	CHILE	ALL OTHER	TOTAL		
WHOLE	85,847,065	6,361,476	21,128,110	113,336,651		
FILLETED	11,983,673	73,450,837	16,670,787	102,105,296		
TOTAL	97,830,738	79,812,313	37,798,898	215,441,948		

B. PRODUCT SITUATION

More than 90% of the US salmon harvest is caught in Alaskan waters. The highest volume varieties are Pink, Chum and Sockeye, none of which are caught commercially in California. King salmon is the highest priced, and lowest volume, salmon species caught in the US. In 1998, US King salmon landings totaled 16.2 million pounds.

California's commercial salmon industry is limited to King salmon. Landings peaked at 16.6 million pounds in 1988, then declined sharply to 2.0 million pounds in 1992. Although Alaska has historically been the leading King salmon producer, the apparent decline of its fishery stocks combined with the gradual rebuilding of California's caused the (estimated) 2000 season harvest in California to exceed Alaska's (Figure 1). Since 1990, the number of licensed salmon vessels in California has dropped from 3,248 to 1,702, but less than 500 are estimated to be fishing commercially for salmon. Thus, productivity of individual vessels has risen dramatically.



Ten years ago, US consumption was split evenly between canned salmon, and fresh and frozen salmon. By 1999, fresh and frozen salmon consumption had almost quadrupled while canned consumption remained essentially unchanged. Alaska's salmon catch is mainly canned or frozen. Data regarding utilization by market are not available for California salmon, but it is mostly marketed fresh.

Smokers are a small niche market for California salmon. Several small smokers in California and a few larger ones in the Midwest use California Kings because the larger fish have a higher fat content, but others insist on only farmed Atlantic salmon. A major Southern California smoker went out of business several years ago. One firm markets canned California King salmon as a specialty food item in limited volumes across the country. California's potential in the smoked and canned markets appears to be severely restricted by the plentiful, low-cost supplies of Alaskan salmon.

The market for fresh salmon is the focus of this analysis. The frozen salmon market for California salmon is reviewed briefly in Section L of this report.

C. SALMON PRICES

Between 1990 and 1998, US season average ex-vessel prices for King salmon ranged from a low of \$1.20 in 1998 to a high of \$2.37 in 1992. The season average ex-vessel price for King salmon in California during 1999 was \$1.93. Meanwhile, prices in late October, 1999 for winter troll Kings from Alaska were reported at \$3.75 to \$4.00 per pound. Virtually all of the fish was flown out fresh to restaurants in the Pacific Northwest. Preliminary estimates for the 2000 season place the season average ex-vessel price for California King salmon at above \$2.00. Clearly, Alaska Kings still enjoy a significant price premium over California Kings.

The price spread between California King salmon and farmed Atlantic salmon varies widely among wholesalers interviewed for this study. During June 2000, some wholesalers reported pricing the two fish at the same price, while others charged a premium ranging from \$.10 to \$.50 a pound for California Kings. During 1999, the reported customs value of farmed Atlantic salmon imported from Canada ranged from a low of \$2.39 in December to a high of \$2.66 in May. A review of import values published by Urnar Barry did not support the claim made by some fishermen that wholesale prices for farmed Atlantic salmon drop significantly during California's salmon season. Some retailers have long-term price contracts with their farmed salmon suppliers.

D. CONSUMER USAGE AND AWARENESS

The consumer focus groups and in-store interviews conducted for this study confirmed fresh salmon's popularity in California. Among consumers who do buy salmon, 75% stated it was the fresh fish variety they bought the most. They like salmon because of its ease of preparation, versatility, taste, color and health benefits. Most consumers barbecue or broil it.

Salmon's retail price was rated to be an extremely important factor in the purchase decision of only one-third of the upscale consumers. Not surprisingly, the middle-income consumers in the focus groups expressed more concerns about the price of salmon. However, they were willing to pay a little more for wild salmon once they had been informed about the differences between wild and farmed salmon

Consumers have some awareness of different kinds of salmon. Two-thirds of the upscale consumers mentioned one or more species. They are most aware of Coho salmon (31%) and King salmon (25%). Seventeen percent are aware of Atlantic salmon.

About half of the upscale consumers are aware that salmon is caught commercially in California. There was virtually no awareness among middle-income consumers that California has a commercial salmon fishery. Although Copper River is highly regarded, the middle-income consumers were not aware of it and only 1 in 10 of the upscale consumers mentioned it. When the Southern California focus group participants were told about California salmon, they expressed some concern about the ocean's cleanliness. There was very limited consumer awareness of when California's commercial salmon season is.

Among the upscale consumers, 2 out of 3 are aware of wild salmon. They had knowingly purchased it and/or identified a difference between wild and farmed salmon. The middle-income consumers in the focus group had little awareness of farmed salmon and had no clear preference for wild salmon until salmon farming methods were described.

Consumers in the focus groups and in the one-on-one interviews were asked to select which type of salmon they preferred if the offerings were priced equally and looked equally good. The selections were: Alaska King salmon, California King salmon, Farmed Atlantic salmon, Farmed Chilean salmon and Pacific King salmon. The Northern California group preferred Pacific King salmon for it was fresh and ocean caught. The Southern California group favored Alaska King salmon because it came from clean waters and for its taste. Among the upscale consumers, California King salmon was the most preferred (44%) due to its freshness, followed by Alaska King (30%). Overall, 9 out of 10 of these consumers preferred wild King salmon over farmed Atlantic salmon.

E. IDENTIFYING SALMON

California King salmon is identified in many ways. Most of the fishermen interviewed for this study thought that their product should be identified as "California Troll Caught King Salmon." However, many retailers commented that consumers do not know what "troll caught" means, and that the term "wild" is more meaningful to consumers. The Seafood Producers Cooperative (SPC) labels their fish as "Wild & Natural."

Some retailers identify California King salmon as "Pacific"; this gives them the flexibility to sell Oregon and Washington Kings as well. Conversely, some restaurants and a few retailers want to be as specific as possible in identifying where the fish was landed, or will label it as "local." They believe that the local designation connotes the highest level of freshness.

During focus groups conducted for this study, middle-income consumers expressed little interest in how salmon are caught. They were not enticed by the phrases "troll caught" or "line caught."

All of the consumer groups were asked which of the following ways they preferred to identify California King salmon:

Natural California King salmon Ocean Caught California King salmon Ocean Fresh California King salmon Wild California King salmon

Participants in the Northern California focus group were fairly enthusiastic about the phrase "ocean fresh." In the Southern California group, participants recommended avoiding the word "California" because they did not consider the California ocean to be clean. They also reacted positively to the word "wild." The upscale consumers favored "Ocean Fresh California King Salmon" (39%) and "Wild California King Salmon" (35%). They chose "Ocean Fresh" mainly because it was the freshest sounding. "Wild" was chosen either because it was the freshest sounding or because the respondent liked wild salmon.

F. QUALITY

The California Salmon Council's efforts to improve the handling of salmon have been effective. Receivers and fishermen also credit SPC with raising the overall quality of California King salmon. SPC will take fish that are up to 5 days old, and grade the salmon for scale loss, core temperature, eye brightness, odor, shininess, firmness and the cleanliness of the belly cavity.

Most receivers, wholesalers, distributors, restaurateurs and retailers stated that the quality of California King salmon has improved noticeably during the past 5 years. However, a few commented that fishermen compromised the quality at the beginning of the 2000 season by catching more fish than they could clean in an appropriate period of time.

Freshness is the most important quality characteristic affecting consumers' purchase decisions. The characteristics that consumers during the one-on-one interviews were most likely to rate as "extremely important" to their salmon buying decision were: "fresh tasting"--100% and "fresh looking"—94%.

G. MARKETING CHANNELS

Various channels are used to market California King salmon. Most California Kings are sold in the fresh market through established receivers and SPC. These firms had varying outlooks about California Kings; however, most commented that the market appears to be improving. Some receivers sell directly to restaurants and grocers; however, most of their volume is sold through wholesalers. A few reported that they are regaining their wholesale markets in larger metropolitan areas in Arizona, Colorado, Chicago, Dallas, and along the East Coast.

While Seattle is the center of the Copper River salmon market, consumers in the Northwest are known to be connoisseurs of salmon in general. The Northwest is a sizable market for California King salmon until the Copper River season opens. Some upscale restaurants and some grocers continue to carry California King salmon along with Alaskan and Northwest Kings as long as the supply lasts.

Wholesalers usually deliver fish directly to individual stores and restaurants instead of their warehouses. Some customers want whole salmon, while others want all or part of their order in filleted sides. Steaks are cut at the store or restaurant. Despite rising labor costs and the growing popularity of pre-cut products in the restaurant sector, demand for portion-packs is limited to a few chains. They seem to be most popular with midscale operations that buy the farmed Atlantic salmon. Grocery operators and white tablecloth restaurants prefer to cut their own salmon pieces in order to maximize the freshness of the fish.

Wholesalers tend to specialize in a specific market segment, such as large grocery chains, smaller upscale grocery chains, natural foods stores, white tablecloth restaurants or exports. California salmon exporters commented that Europeans appear to developing considerable interest in wild salmon because of adverse publicity regarding farmed product. Wild Atlantic salmon may be headed for extinction in the North Atlantic because of overfishing and competition in breeding rivers from escaped farmed salmon.

A growing number of entrepreneurial receivers are selling California King salmon to upscale grocers and restaurants. Usually sole proprietorships, they buy directly from the fishermen, typically paying a premium for higher quality fish. They deliver to the stores and restaurants. Some leave their totes to provide storage and pick them up when they make their next delivery.

Grocery stores are a key market for California King salmon. It is likely that recent consolidations in the industry have benefited the farmed salmon industry at the expense of California salmon fishermen. As chains expand, they need larger suppliers to meet their requirements and have the market power to enter into supply contracts with farmed salmon wholesalers.

Some chains allow individual stores to do additional buying, to supplement the farmed salmon that the chain's regional office supplies to each store. Many stores prefer salmon in the 7 to 11 pound range and will refuse larger fish because the large steaks are considered unsellable. Other chains and some restaurants want the salmon to be as large as possible. Some receivers pay a premium for the largest fish.

Upscale chains in Northern California (such as Andronicos, Cosentino's, Draegers, Mollie Stones and Whole Foods) are more flexible regarding the unpredictable supply of California King salmon than are chains in Southern California. Chains in Arizona, Colorado, Texas and the East Coast will feature California King salmon one or two times during the season on a "while supplies last" basis; some do not include the price in their ads. Their treatment is somewhat comparable to that given to Copper River salmon, where the product is marketed as a highly seasonal special treat for consumers.

Some fishermen sell salmon (and other fish) at Farmers' Markets. The following seven markets were identified as the "best" in Northern California in the September 2000 issue of *Sunset* magazine: Berkeley, Davis, Palo Alto, Ferry Plaza (San Francisco), Marin County (8 different locations), Pleasanton and St. Helena. Davis, St. Helena and some of the Marin County locations lack the consistent presence of at least one salmon fisherman during the season. The St. Helena market could be particularly profitable, since local restaurants and staff from the Culinary Institute of America at Greystone shop there.

A few fishermen do their own direct marketing by selling their salmon off their boats. However, this practice was much less prevalent during the 2000 season than during the 1998 season when prices were severely depressed.

There is at least one consumer-oriented fish market operation at each of the major ports. These retailers buy their fish from the local fishermen. They sell whole or portioned fish to consumers. Some have restaurants that feature the local catch.

The middle class consumers participating in the focus groups were mostly likely to buy their salmon at Costco, which sells farmed Atlantic salmon exclusively. The consumers interviewed in the upscale Northern California stores bought their salmon primarily at the store where the interview was conducted or at other upscale local grocery stores. A few purchased salmon from a fish market at the nearby harbor.

H. COMPETITIVE SITUATION--Copper River

Alaska's Copper River fishery opened in 2000 just two weeks after the California King salmon season began. The opening was a media event, filled with print, television and radio coverage about the eagerly awaited fish. Although Seattle is the largest marketplace for the fish, several California retailers and restaurateurs commented how their customers were clamoring for the fish. The mystique enables grocers to charge over \$15.00 a pound for the Kings and slightly less for the Sockeyes. However, awareness of Copper River salmon among the upscale Northern California consumers was relatively limited.

Copper River Kings reportedly have a higher fat content than California Kings or Atlantic salmon. In the August 30, 2000 issue of the *San Francisco Chronicle*, a Copper River processor stated that the extreme cold of the river enhances the firmness of the fish and makes the "texture as fantastic as the taste." Some of the wholesalers, grocers and restaurateurs interviewed believed that the product warrants its premium price because of its superior flavor and color. Some buyers considered Copper River Kings to be highly overrated or that California Kings were of comparable quality. Others commented that the extremely high fat content of Copper River Kings provided fish of extraordinary flavor and firmness. Several customers felt that California Kings start out the season with a somewhat soft texture which firms up as their diets change. One receiver stated that "It's too bad we don't have the marketing funds to tell people that we're even better than Copper River."

Fishing on the opening day of the Copper River season is limited to a 24 hour period. More than 500 boats make the 45 minute run to the fishing grounds from Cordova. During the first part of the season, the boats are usually restricted to fishing on the outer banks of the barely emergent bars. The fish is harvested using gill nets.

Historically, canneries were the primary market for Copper River salmon. In 1983, a Seattle fish marketer, Jon Rowley, partnered with a fisherman and implemented rigorous quality control standards. He arranged to have float planes ferry the catch into Cordova, where it was flown down to Seattle. The first 300 pound shipment was divided among several restaurants, including McCormick's Fish House. In 1984, Seattle's Queen Anne Thriftway was the first grocery store to receive and promote Copper River salmon.

During the 2000 Copper River season, Thriftway continued to sell the fish in the store as well as listing it on its website for mail order sales. Seattle's Copper River Festival (May 19th through June 3rd) was sponsored by the Queen Anne and Admiral Thriftways. It started with a race among Seattle fish buyers to see which one returned first with their load of Copper River fish. The Festival also included a Guest Chef series involving 21 local chefs who conducted cooking demonstrations in front of the sponsoring stores. The chefs also featured the fish in highly publicized menus at their restaurants.

For the 2000 season, Alaska's Department of Fish and Game forecasted the Copper River catch at 60,000 Kings; however, only 32,000 Kings were actually caught. The 1999 catch was equally disappointing.

I. COMPETITIVE SITUATION—Farmed Atlantic Salmon

Salmon farming is a multi-billion dollar business and most of the influential suppliers are multinational firms. These firms are highly vertically integrated, frequently manufacturing the feed and supplying the transportation services. The industry's rapid consolidation was reported in the July, 2000 issue of *Seafood Business*. Last summer, Nutreco Holding, a vertically integrated Dutch agribusiness giant, bought Marine Harvest, the second-largest salmon farming company in the world. Now, it is proposing a \$450 million acquisition of Norway's Hydro Seafood, the world's largest salmon farming company. Two other Norwegian companies, Pan Fish ASA and Stolt Sea Farm A/S, have also been buying up salmon farms. Pan Fish now owns all of the salmon farms in Washington state and is expected to harvest an estimated 20,000 tons of Atlantic salmon from its sites in Washington and British Columbia. Its total production (including farms in Norway, Scotland and Denmark's Faeroe Islands) is expected to exceed 100,000 tons in 2000. Stolt Sea Farm harvested about 60,000 tons of farmed salmon in 1999, has sites in British Columbia, New Brunswick, Maine, Chile, and Norway, as well as a salmon processing plant in Los Angeles.

Heritage is another large salmon-farming company. It is a unit of George Weston Ltd., a multi-billion dollar Canadian food company. Heritage now has sites in Maine, New Brunswick, British Columbia and Chile. With the consolidation, four companies—Stolt, Marine Harvest, Pan Fish and Heritage—appear to be producing more than half of the farmed salmon sold annually in North America.

According to the August 23, 2000 issue of *WorldCatchNews Network*, Salmones Multiexport, Chile's largest salmon exporter, announced plans in August, 2000 to control 5% of the world farmed salmon production and sell more than \$400 million annually within 10 years. It expects to sell \$110 million of salmon this year and claims to control 2% of the world's production currently. It is planning to develop farms in Norway and Canada, and to open commercial offices in Japan, Europe and the US.

Large grocery chains want large volumes of fresh salmon fillets year-round with contract pricing. Corporate Atlantic salmon farming operations are able to provide such a steady flow of product. Costco's annual sales of farmed fillets at its club stores in North America are now estimated to have reached 10 million pounds.

Most, but not all customers, stated that the quality of California King salmon is superior to that of farmed Atlantic salmon. Some chefs commented that farmed Atlantics tend to have a musty flavor. Some retailers stated that they carry Atlantics along with California Kings because they have customers who are used to the milder flavor of the farmed product.

A rising backlash is appearing against farmed fish. Initially, many environmentalists considered fish farming to be a positive development because they thought it helped maintain the sustainability of troubled fisheries. However, there is growing evidence that salmon farming has negative effects on water quality, the environment and native species. Farmed salmon are raised in confined pens; these conditions encourage the spread of disease that must be controlled with antibiotics and vaccines. Much of the residue ends up in the water. A typical salmon farm is reported to generate as much waste as a city of half a million people, which can threaten the marine environment.

Farmed salmon may also threaten wild salmon when pens accidentally rip open, releasing nonnative species into surrounding waterways. In the north Pacific Ocean, over 255,000 Atlantic salmon have reportedly escaped since the early 1980s and are caught by fishing vessels from Washington to Alaska. Besides competing for food and spawning habitat, escaped salmon may interbreed with wild salmon. Successful interbreeding was reported in at least one Pacific Northwest stream, according to a recent article in *Conservation Biology*.

British Columbia is the largest supplier of farmed salmon to the US. However, it recently (October, 1999) adopted tough new environmental regulations to clean up the industry and many salmon farms are being forced to relocate. In the short term, the new regulations will increase the cost of raising farmed salmon. In British Columbia, only three antibiotics are licensed for use—oxytetracycline, Romet-30 and Tribrissen.

A summary of a recent article in *Nature* about fish farming is included as Appendix D. According to the article, farmed fish compete for food sources with wild fish. Fish meal and fish oil are the dominant ingredients in farmed salmon feed. The authors estimated that 3.16 pounds of fish biomass is needed for feed to produce a pound of farmed salmon.

An increasing proportion of farmed Atlantic salmon imported to the US is coming from Chile. Chile's salmon farms are reportedly located far from the major airport. The extended transportation time is likely to compromise the freshness of the product.

Another drawback to farmed salmon is the dye used to enhance the color of the fish. Feed for smolts contains pigment to put a base color in the flesh. Grower rations contain a higher level; the two most commonly used coloring agents are Canthaxanthin and Astaxanthin; they are synthetic, petro-chemical based products. It seems unlikely that environmentally-conscious consumers would eat farmed salmon if they knew the salmon feed included antibiotics and dyes.

Grocery stores typically leave off the term "farmed" when identifying their farmed salmon; sometimes, they label it as "Atlantic salmon." Consequently, consumers do not know if they are buying farmed or wild salmon. When salmon farming was described to the focus group participants, they immediately developed a preference for wild salmon. During the interviews in the upscale stores, 90% of the consumers chose a type of wild King salmon when asked to select their preferred salmon from a list of 3 different types of wild salmon and 2 types of farmed salmon. None selected the farmed Chilean product.

As previously reported, two-thirds of the upscale consumers were aware that there are differences between wild and farmed salmon. A few commented specifically that farmed salmon is fattier than wild salmon. When asked to rate the importance of various characteristics on their buying decision, they ranked "fed no dyes or additives" as the third most important with 52% indicating that it was "extremely important." Having "dark pinkish-orange flesh" was ranked as fifth most important with 46% indicating that it was "extremely important." A small group considered farmed salmon to be more environmental sound, believing that it reduces pressures on wild salmon stocks. Most consumers have a clear preference for wild salmon once they learn about salmon farming.

J. GENETICALLY MODIFIED SALMON

Genetically modified Atlantic salmon are being developed. They grow bigger and more rapidly than regular farmed salmon. The transgenic fish contain DNA from another edible fish. A Canadian-based fish farm, A/F Protein, is seeking FDA's approval to market the fish. Environmentalists have expressed strong concerns about the modified fish escaping and breeding with salmon in the wild. Developers have responded by attempting to ensure that the modified fish are sterile. Given the recent consumer response regarding food products that mistakenly included genetically modified yellow corn not approved for human consumption, it is likely that there will be considerable consumer resistance to genetically modified salmon.

K. ORGANIC AND SUSTAINABLE FISHERIES

Organic certification and sustainability certification for specific fisheries are closely related. USDA's current organic proposal does not address fish. Two major forces in the organic industry, the Organic Trade Association and Whole Foods Markets, have publicly stated that they do not support organic certification for fish because there is little control of the system. Specifically, a Whole Foods' executive commented that "Wild is organic by neglect....allowing wild fish to piggyback on organic is going to water down organic."

Despite these objections, two salmon suppliers have obtained organic certification. Prime Select Seafood in Cordova, Alaska, is selling certified organic Copper River salmon and may eventually sell organic halibut as well. The company was certified by the Organic Growers and Buyers Association (OGBA) after its inspectors reviewed the fishermen, processing facility, sub-processors and handlers involved in producing the fish. Flesh samples from the fish were tested for residues of mercury and PCBs. Prime Select is reportedly promoting its certification in Japan and Europe.

Capilano Pacific's certification from Farm Verified Organic is different. Its Bristol Bay fishery has been certified as sustainable while its processing has been certified as organic. The cooperative (with members from Alaska and the Pacific Northwest) is based in Bellingham, Washington; it has introduced a line of packaged frozen salmon under the Wildfish brand. The frozen products include portions of King salmon, Sockeye salmon, Coho salmon, Alaskan halibut and yellowfin tuna, as well as smoked salmon (lox and dry cured) and sockeye salmon burgers. Each brightly colored frozen salmon package contains 2 skinless 6-ounce portions; there are 28 packages per case. Capilano Pacific is supplying its own display cases for hanging the packages. It is not known where the products are currently distributed. The natural foods chain, Wild Oats, is considering carrying the product line.

Sustainability of fisheries has become a major issue for environmentalists. In March 2000, the Alaska Board of Fisheries formally adopted the "Sustainable Salmon Fisheries Policy for Alaska" that will become an integral part of the board's yearly review of the state's salmon fisheries. The policy contains five fundamental principles for sustainable salmon management, each with criteria that will be used by the department and the board to evaluate the health of the state's salmon fisheries and address any conservation issues and problems as they arise. The five fundamental principles of the policy are:

- Wild salmon populations and their habitats must be protected to maintain resource productivity;
- Fisheries shall be managed to allow escapements within ranges necessary to conserve and sustain potential salmon production and maintain normal ecosystem functioning;
- Effective salmon management systems should be established and applied to regulate human activities that affect salmon;
- Public support and involvement for sustained use and protection of salmon resources must be maintained;
- In the face of uncertainty, salmon stocks, fisheries, artificial propagation and essential habitats must be managed conservatively.

Marine Stewardship Council (MSC) is an international, privately-funded organization. Its goal is to promote sustainable fisheries and responsible fishing practices worldwide. MSC's principles are stated below; they are similar to Alaska's Sustainable Salmon Fisheries Policy.

- 1. The fishery must be conducted in a way that does not take more fish than can be replenished naturally or kills other species through harmful fishing practices.
- 2. The fishery must operate in a manner that ensures the health and diversity of the marine ecosystem on which it depends.
- 3. The fishery must respect local, national and international laws and regulations for responsible and sustainable fishing.

On September 5, 2000, MSC announced that it had certified Alaska salmon as the first US fishery to be sustainable. The natural foods chain, Whole Foods Market, is allied with the MSC. The chain has been using a "Fish Forever" eco-label to signify to consumers that a product was caught using environmentally sound, economical and socially responsible management practices.

The Monterey Bay Aquarium and the National Audubon Society both publish seafood guides for consumers based on their assessments of the sustainability of certain fisheries. "Wild caught" salmon from California and Alaska are identified as "best choices" by the Monterey Bay Aquarium, while farmed salmon is categorized as "avoid." In the Audubon Society's guide, the wild salmon fishery is reported to be "healthy in Alaska; most ... are in severe trouble elsewhere" and fishery management is rated as "good in Alaska and poor elsewhere." They state that the fishery has low bycatch problems but "...salmon farming pollutes, displaces wild fish, and prompts the shooting of predatory seals near farms."

Another major environmental organization, The Natural Resources Defense Council, has not rated the California salmon fishery. However, it has determined the Alaska salmon fishery to be "so far so good" while designating some fisheries, such as red snapper and farm raised shrimp to be "fish in hot water." The NRDC does not have an official stand regarding fish farming. They do not oppose it, but believe it needs to be carried out and maintained in an environmentally sound manner.

An in-depth study of consumer interest in an eco-labeling program for seafood was conducted at the University of Rhode Island in 1998 (Wessels, et al.). Data were gathered from 1,640 seafood consumers nationwide using telephone interviews. Three seafood species were included, one of which was salmon. The research indicated that there was a general lack of knowledge about the status of fish stocks. When consumers were asked if they considered salmon to be overfished, 62% were unsure, 21% said "moderately overfished", 14% said "severely overfished" and 3% responded "not at all overfished." Their opinions were influenced by their level of education; concern about overfishing increased with level of education.

The ranking of the most to least preferred salmon products were:

- 1. Certified farmed salmon
- 2. Certified wild salmon
- 3. Uncertified farmed salmon
- 4. Uncertified wild salmon

In a second set of questions, consumers were asked about their preferences regarding certification and country of origin. The product rankings (from highest to lowest) were:

- 1. Certified US salmon
- 2. Certified Norwegian salmon
- 3. Uncertified US salmon
- 4. Certified Chilean salmon
- 5. Uncertified Norwegian salmon
- 6. Uncertified Chilean salmon

Participants in the focus groups conducted for this study did not believe that California's salmon fishery was overfished, nor did they value eco-labeling. Among the upscale consumers, there was more concern about overfishing. "Certified as a sustainable fishery" ranked sixth among the criteria used to influence their purchase decision; 41% rated it as "extremely important." Several consumers seemed halfhearted in their commitment, prefacing their rating with a comment similar to "Well, I guess I should be concerned about this." Their actual commitment will be assessable when MSC's certification appears on Alaska salmon sold at Whole Foods Markets.

L. FROZEN SALMON

Most of the frozen California King salmon appears to be exported to Japan, although an increasing proportion is being sent to Europe. There is a limited market for frozen King salmon in the US; it is sold mainly to smokers. Many wholesalers stated that the US market for frozen King salmon disappeared as the quality of farmed Atlantic salmon improved during the early 1990s.

However, there appears to be a growing niche market for frozen-at-sea product. Some customers refuse to buy farmed salmon even when fresh King salmon is not available. Seattle is the primary retail market for the product, but a few white tablecloth restaurants scattered throughout the US (including San Francisco) are also committed to using frozen-at-sea King salmon. Some cruiseliners also serve the product.

Handling of frozen-at-sea salmon is critical; since it must be kept at very low temperatures (below $-20 \,\mathrm{F}$), there are no appropriate frozen storage facilities in California. Proper defrosting requires thawing the fish from the inside out. This requires much planning for retailers, who typically defrost their seafood in warm water, instead of transferring it from the freezer to the refrigerator. If the fish were sold frozen, educating consumers about the proper defrosting method would also be a challenge.

There are two major suppliers of frozen-at-sea King salmon: SPC and Triad fisheries. The supply of frozen-at-sea salmon is very limited; about 15 boats deliver it to SPC and another 25 to Triad Fisheries. Triad Fisheries was founded by Bruce Gore, a former SPC member. He has been marketing frozen-at-sea salmon for approximately 20 years. Each boat is provided with individualized tags for the fish; this preserves the identity of the fisherman and is considered to enhance quality perceptions of the product.

M. HEALTH BENEFITS

Findings from medical research have generated considerable publicity about the health benefits of eating salmon. The American Heart Association reports that the omega-3 fatty acids reduce the risk of heart attacks and lower LDL cholesterol. On the National Fisheries Institute's website, farmed Atlantic salmon is reported to have the highest omega-3 content with 1.8 grams per 3-ounce serving, followed by Pacific and jack mackeral with 1.6 grams, and King salmon and sablefish with 1.5 grams. The Alaska Seafood Marketing Institute plans to focus on these health benefits in its marketing campaign for the 2001 season.

However, the Food and Drug Administration announced on November 2, 2000 that it would allow only a qualified health claim regarding the benefits of omega-3 fatty acids because of insufficient scientific agreement about the reduced risk of coronary heart disease. A columnist for *GoFish.com* concluded that, "...FDA's verdict likely will be considered a letdown for the seafood industry, which wants to have more freedom to tout the health benefits of omega-3 – something the FDA has long prohibited – to bring more health-conscious customers to the seafood counter."

There was a high level of awareness about salmon's health benefits among the focus group participants and upscale consumers interviewed for this study. Seventy-five percent of the upscale consumers stated that they would read a brochure about salmon's health benefits.

N. SALMON COUNCIL'S PROGRAM

The California Salmon Council was created in 1989. Its 9 voting members and 9 alternates include:

5 commercial salmon vessel operators and 5 alternates

2 receivers and 2 alternates

1 handler and an alternate who is an exporter or a wholesaler, and

1 public member and 1 alternate

Funded by a \$.02/pound assessment, its annual budget has ranged between \$40,000 and \$100,000. With such limited funds, there has not been much consumer or trade advertising. Initially, the Salmon Council focused on education activities to improve the quality of California salmon sold in the marketplace. More recently, it has engaged in a variety of education and promotion activities in the domestic market, including the following:

Produce and distribute recipe and general information brochures

Prepare and distribute press releases

Develop and maintain a website

Obtain a USDA FSMIP marketing grant

Print logo stickers and identifying tags for retail display cases

Provide fresh salmon and collateral materials for Wild California promotion and other promotional events

Conduct a nutrition study

Produce and distribute Public Service Announcements

Produce and distribute promotional video, Pride of the Pacific

Promote a California Salmon Month with a gubernatorial proclamation

Schedule television and radio interviews for staff, board members and spokespersons

Promote internationally using government Market Access Program funds

Advertise and promote in foodservice magazines

Work and make presentations to chef associations

Conduct recipe contest for student chefs

Advertise on a syndicated professional consumer/food service website

Produce table tents

Issue recipes and photographs to California newspaper food editors

Promote in a national consumer magazine

Promote in Southern California consumer magazine

Limited advertising on three San Francisco radio stations

Conduct promotion with a national wine vintner

Produce and distribute handling video for fishermen and processors, Pride and Profits

Produce handling guidelines for fishermen and handlers.

Produce gill tags for off-boat sales Promote off-boat sales with port associations Produce bags for off boat sales

Clearly, the Salmon Council has provided considerable information to consumers. During the in-store interviews, most consumers (77%) said were interested in getting a brochure with recipes and cooking tips. They were also interested in brochures about salmon's health benefits (75%), handling guidelines (61%), and the salmon fishery (53%).

O. ASSESSMENTS ON CALIFORNIA SALMON FISHERMEN

As noted above, a mandatory \$.02/pound tax is assessed against fishermen on all California salmon landings to fund the Salmon Council. It is collected along with a \$.05/pound Fish and Game tax. Assessments for the Pacific Coast Federation of Fishermen's Associations and local fishermen's associations are voluntary; they typically total about \$.06/pound. Collection of these assessments is usually handled by commercial receivers, who weigh the fish when unloading and file monthly tax statements to the Department of Fish and Game. Landings receipts are supposed to be completed daily and are reconciled with the tax payments.

The collection system changes when fishermen sell direct through dock sales or at farmers markets. They need access to certified scales to weigh their fish accurately. They also need to complete forms and submit them to the Department of Fish and Game. Busy fishermen can forget to record their daily landings and file their monthly tax payments. Given the staffing limitations at the Department of Fish and Game, it is difficult to estimate underpayment levels.

P. PORT FACILITIES/INFRASTRUCTURE

Because California's King salmon season has staggered openings, the docks at Pillar Point and the southern ports are often congested during the first part of the season. The receiver at Moss Landing reported unloading approximately 425,000 pounds of salmon during the first 10 days of the 2000 season. Most of the ports have aging facilities and there are few public hoists available for independent fishermen to use. Some receivers will unload an independent fisherman's boat for a small fee. One receiver admitted that the receivers at his port "discourage" independent fishermen from unloading at their port by refusing to buy much of their fish.

One large receiver asserted that trip fishing creates continual mini-gluts. He stated that many boats go out on Monday and come back in on Friday. Since it is difficult to access buyers on Friday afternoons, the fish sit until Monday when the buyers begin receiving their weekly orders for farmed salmon. This makes it difficult to find buyers for the aging ocean-caught fish.

Q. FISHERIES MANAGEMENT REGULATIONS

Most fishermen recognize the need for some regulation of commercial salmon fishing in California. However, many believe that midseason closures are devastating to marketing. Furthermore, they prefer that all ports be opened at the same time. The more extensive openings would give more flexibility to the fishermen, reduce pressures on port facilities, and provide a steadier stream of fish for the handlers and wholesalers. Fishermen do not think that they can supplement their fishing allocations through the purchase or lease of fishing rights from Indian tribes; they believe that the tribes will steadfastly refuse to consider such transactions.

Economic theory suggests that the current regulatory structure of California's commercial salmon fishery creates gluts in the marketplace. It depresses prices because the catch is highly perishable; the fishermen have a limited number of delivery options. Opening more ports and/or extending the fishing season would create more marketing opportunities. This would raise ex-vessel prices while also reducing their volatility.

CONCLUSIONS

As stated in the Introduction, the primary purpose of this project was to determine how California King Salmon can compete more effectively with other salmon. California's salmon fishermen are now offering fish that rivals Copper River salmon in quality. However, the year-round availability and consistent nature of farmed Atlantic salmon has made it the favored salmon with many wholesalers, grocery stores and restaurants. Although salmon tends to be the favorite fish among California consumers, few are aware of California King salmon or know much about the fishery. Consequently, few consumers express a preference for California King salmon, giving most grocers and restaurants little reason to offer the product.

It is imperative that the Salmon Council develop and promote a brand for California King salmon. Although Alaska's upcoming salmon marketing campaign will focus on the health benefits of salmon, the Salmon Council should not adopt this positioning; awareness of these benefits is already high among consumers. Instead, it should focus on raising consumer awareness of the differences in salmon and getting them to switch from farmed salmon to California King salmon during the season.

Specifically, the Salmon Council should promote the California origin, freshness and wild nature of its fish. It cannot rely on grocery stores and restaurants to distinguish wild salmon from farmed salmon. It must develop an identifiable brand name and logo, and promote it at every opportunity possible given its limited budget.

RECOMMENDED STRATEGY

The Salmon Council must be careful not to make negative statements about farmed salmon. Instead, it must educate its target audience, primarily upscale and/or environmentally-conscious consumers, about the meaningful differences between California King salmon and farmed salmon.

The Salmon Council needs to differentiate its product from farmed Atlantic salmon. Because the Salmon Council's budget is very limited, a "pull" strategy needs to be utilized to raise consumer awareness and interest in California salmon. This will cause consumers to ask for California King salmon at grocery stores and restaurants, who in turn will demand the product from their wholesalers. This strategy will take several years to become effective. A push strategy generates a quicker response. However, the Salmon Council does not have the resources to employ a push strategy, which requires a sales force and trade promotion.

Thus, the Salmon Council must make a long-term commitment to a pull strategy. Several years are needed to change the attitudes and buying habits of the consumers and the trade. Consequently, maintaining a consistent long-term program is essential.

A number of specific pull tactics are recommended below. They revolve around the following three strategic elements:

- Position California King Salmon as "wild"
- Focus on the target market
- Utilize partnerships with appropriate organizations

B. STRATEGIC ELEMENT #1—WILD POSITIONING

The need to differentiate California King Salmon from farmed Atlantic salmon is foremost. Differentiation is essential to offset the "inconvenience" wholesalers, grocers and restaurants associate with carrying California King salmon. The wild nature of California King salmon is currently perceived as a drawback by many grocers and restaurants; it must be turned into its biggest advantage. There are two related components to the wild nature—wholesomeness and environmental soundness. The wholesomeness is attributable to how wild salmon feed and spawn. California salmon fishermen are an important element of this wild image; they are rugged small businesses, unlike multinational fish farms. They need to become charismatic spokespersons for their product, similar to small, organic farmers. This means communicating with consumers and chefs about the positives of the fishery, **not complaining about low prices, stringent regulations or low stocks.** This powerful communication process has already begun with the hosting of port visits by students from the Culinary Institute of America.

The environmental soundness of California's King salmon fishery has been verified by the Monterey Bay Aquarium. The recent growth in the seasonal catch also attests to the rebuilding of fishery stocks. This quality must now be conveyed to consumers. They need to be educated regarding the soundness of management practices of the commercial California salmon fishery. Fishermen have made large sacrifices to rebuild and sustain the fishery, and they should be proud to promote the beneficial outcomes.

The wild positioning will also reinforce the freshness of the fish. Consumers consider freshness to be the most important factor influencing their fresh fish purchases. Several consumers preferred the "wild" label because it meant the fish was fresh.

Although the Omega 3 fatty acids in California King salmon are a tangible benefit, nutrition messages are losing their appeal with consumers. They are constantly bombarded with findings about a particular product; the multitude of reports is confusing and sometimes contradictory. Furthermore, this benefit does not distinguish California King from its major competitor, farmed Atlantic salmon. It is worth mentioning, but is clearly secondary to the wild positioning.

If strong preferences for wild California King salmon can be developed, then demand for frozen-at-sea product might expand. Fresh salmon should be the Salmon Council's initial focus; however, if the effort is successful, then the Salmon Council can move on and capitalize on consumers' loyalty toward wild salmon to overcome their resistance towards buying frozen fish.

Thus, the Salmon Council's marketing program must inspire consumers to request that their grocery stores and restaurants carry California King salmon. Without the differentiation, the market for California King salmon will plummet as the supply of farmed Atlantic salmon continues to grow.

This differentiation must be made carefully by emphasizing the benefits of California King Salmon, rather than attacking the farmed Atlantic salmon. Most grocers and restaurants sell considerable volumes of farmed salmon, particularly when wild King salmon is not available. They will not be receptive to messages that their primary salmon product is flawed.

The following three major recommendations support the wild positioning strategy element:

√ The Salmon Council should promote Wild California King Salmon as its brand.

The phrase, "Wild California King Salmon" must be displayed prominently on all of the Salmon Council's promotional materials. If possible, its website domain name should be changed to "wildcasalmon."

√ The Salmon Council's logo should be redesigned to reflect the "wild" positioning.

The visual needs to be more stylized. The logo is a critical identifier of the brand. It needs to be revised before other elements of this proposed program are implemented.

✓ A broad-based public education program about the California King salmon fishery is essential.

A brochure about the California King salmon fishery should be developed and broadly distributed. It should include the following information: California King salmon's lifecycle, what they eat and how this affects the flesh color, spawning, season opening dates, the small business nature of the California salmon fishery, and how California salmon fishermen protect the sustainability of their fishery. The information should also emphasize the superiority of California King salmon—its freshness, firm texture and robust flavor. Seafood counters are an ideal location to distribute the brochure while consumers wait for their orders. This information should also be added to the Salmon Council's website.

✓ Other tactics to support this Wild Positioning element include (in descending order of importance):

• Sponsor a Salmon festival to celebrate the opening of the California salmon season at each major port.

There is much ceremony surrounding the beginning of the Copper River season. A similar festival should be arranged as the salmon season opens at each harbor. The Salmon Council should be responsible to notifying the local press, and for arranging participation from local grocery stores. Local chefs and their restaurants should be featured. The press should be provided access to several fishermen.

- ◆ Develop metallic gill tags personalized with the name of fishing vessels and the California Salmon Council's logo.

 The tags reinforce the image of the individual fisherman, unlike the farmed salmon. The tags can promote relationships between fishermen, handlers, wholesalers and restaurants. The tags would also be visible on whole salmon displayed at grocery stores and fish markets.
- Institute a Fisherman of the Year award and produce appropriate publicity.

The award would highlight the person's contributions in maintaining a sustainable fishery.

- Develop educational displays about the fishery for the outside of key Harbor Master buildings.
 - The display would emphasize the sustainability of the fishery.
- Encourage fishermen to sell their salmon at harbors and Farmers Markets.

Direct boat sales and Farmers Markets are important for enhancing the image of fishermen, as well as serving as an additional channel of distribution. Few fishermen participated in direct boat sales during the 2000 season, and many upscale markets in Southern California and a few in Northern California (namely in Marin County, St. Helena and Davis) did not have consistent presence of California salmon fishermen. No salmon fishermen sell at Farmers Markets in Southern California although a large population of consumers in the upscale coastal communities from Santa Monica to Laguna Beach would be receptive to buying salmon at Farmers Markets. A group of fishermen could arrange with the Market to rotate through it; this would eliminate the need for each one to commit to being at the market on a weekly basis. These direct sales locations should be listed at the Salmon Council's website.

• Develop a position paper regarding the sustainability of the California King Salmon fishery.

The purpose of the paper is to highlight the fishermen's conservation practices. The Salmon Council could consider collaborating on this with PCCFA or Monterey Bay Research Institute. The paper should be publicized extensively.

D. STRATEGIC ELEMENT #2—FOCUS ON A TARGET MARKET

In order to meet the fishermen's price expectations, California King salmon must be an upscale product. Farmed Atlantic salmon is more attractive to price-sensitive consumers; it has been well received by shoppers at Costco. The in-store interviews indicated that affluent, well-educated consumers are the target market for California King salmon. They tend to be the most food-oriented or environmentally conscious, and did not express much resistance towards paying a premium for wild salmon.

Such consumers are more likely to live on the West and East Coasts. In the European market, the British and French appear to be the most environmentally conscious.

Since the Salmon Council's budget is limited, it should focus its marketing efforts on upscale geographic areas, upscale grocery markets and upscale restaurants. Otherwise, its meager resources will be diluted too much to be effective. This means dropping expectations for the present of gaining product loyalty among large California chains, such as Safeway, Raley's, Albertson's and Ralph's. However, specific stores in targeted areas can be approached for promotion activity since these chains usually allow some direct buying by individual stores.

The target market includes environmentally-conscious consumers. Various tactics to reach this target market involve working with environmental organizations. These tactics are listed under the third strategic element, Partnerships. The following three major recommendations specifically support the Focused Target Market strategy element:

- ✓ Wholesalers, chefs and grocery buyers in targeted markets need to be reminded about the availability of California Kings. A database of wholesalers, chefs and grocery buyers should be developed.

 These individuals should be mailed or FAXed simple flyers advising them about the season, suppliers and product availability, along with a brief reminder of the benefits. The updates should be monthly, starting 1 or 2 months before the beginning of the season and proceeding through the season.
- √ The Salmon Council needs to work with wholesalers to ensure that California King salmon is available during the season at grocery stores in affluent areas. The fact that consumers preferred California King salmon over Alaska King salmon and farmed salmon because of its freshness should be promoted to wholesalers and grocery fish buyers, especially before the opening of the 2001 California salmon season
 - In Northern California, upscale stores such as Mollie Stone's, Whole Foods, Draeger's, Andronico's, Woodlands Market, Crystal Springs Fish Market and Lundardi's are favored locations for buying salmon. Their wholesalers should be supplied with brochures about the fishery to be distributed during deliveries.

√ The Salmon Council needs to promote its brand to white tablecloth restaurants.

The Salmon Council should distribute its fishery brochure through supportive wholesalers and chef organizations (such as Chefs Collaborative). Customized metal gill tags, with the Salmon Council logo and fishing vessel name, would be ideal for promoting the "brand name" with wholesalers and chefs, and distinguishing it from farmed salmon. Videos can be more dramatic; however, the wholesalers, chefs and buyers interviewed do not use them often enough for training to justify the cost. Whenever possible, The Salmon Council should host visits by chef organizations to the major ports.

✓ Other ways to support this Focused Target Market element include:

 Develop a list of upscale markets and restaurants to target in out-of-state markets. Provide the list to all receivers and wholesalers.

Out of state opportunities exist for California King salmon. These grocers can be more tolerant of short supplies than the big chains located in California.

• Develop and distribute a similar list for key European markets.

The Salmon Council is participating in the State's Wild California promotion. Contacts made during that promotion should be included in the list.

E. STRATEGIC ELMENT #3—PARTNERSHIPS

The Salmon Council can stretch its promotion efforts by partnering with appropriate organizations. The most obvious partnerships include specific grocery operations, restaurants, cooking academies, environmental organizations and fishing port tourism groups. These partnerships are win-win alliances. California King salmon has a wild, wholesome image to offer its partners. The main obstacle holding back such alliances is the effort required to establish them, as demonstrated by the California Salmon Council's success with the Monterey Bay Research Institute in revising the listing for California King salmon.

The following three major recommendations support the Partnership strategy element:

√ The Salmon Council can raise awareness of the differences between California King salmon and farmed salmon by capitalizing on its favorable review from the Monterey Bay Aquarium. It should seek reviews from the Audubon Society and other environmental organizations, such as the Natural Resources Defense Council, Marine Stewardship Council and SeaWeb. Other potential partners include Chefs Collaborative and PCFFA's Institute for Fishery Resources; both groups are also developing "Good Fish" lists.

√ Key grocery stores and restaurants that are committed to carrying California King salmon consistently during the season should be identified and requested to partner with the Salmon Council on "beginning of the season" promotions involving media publicity. They should be listed on the website and provided with brochures.

√ The Salmon Council should seek support from related organizations to request opening more or all of the ports for the entire season

This change requires broad-based support. Currently, the southern port facilities are heavily impacted at the beginning of the season. The current regulatory structure creates gluts in the marketplace. It depresses prices because salmon is highly perishable and the fishermen have a limited number of delivery options. More marketing opportunities would raise prices while also reducing their volatility.

✓ Other recommendations supporting the Partnership element include:

♦ Develop stronger communications with salmon fishermen through a monthly newsletter, FAX or email to advise them about Salmon Council's activities.

Fishermen are the Salmon Council's most important partners; they must buy into the promotion program because they are a critical part of it.

♦ Develop alliances with culinary groups, such as the Culinary Institute of America (CIA), California Culinary Academy (San Francisco) and Chefs' Collaborative.

The Salmon Council should formally host visits by culinary students. Chefs and culinary students need to be educated about the fishery and to have contact with some fishermen.

• Fishermen should coordinate their landings more closely with receivers.

In particular, trip boats should avoid coming in on Friday mornings. It is difficult for receivers to access buyers on Friday afternoons, so the fish sit until Monday and lose their freshness.

• Develop brochure(s) with easy-to-prepare grilling recipes.

The recipes or cooking tips could include encouragement to prepare extra grilled salmon; the leftover fish can be used in a quick salad or pasta dish. Baking recipes could be offered as being something different. A brief review of the health benefits should be included. The brochure should be distributed through wholesalers at seafood counters. The Salmon Council could investigate partnering on these brochures with California-based specialty food companies that market marinades and sauces, such as Napa Valley Kitchens, Earth and Vine Provisions and Annie Chun's.

• Partner with fish markets at the ports.

The major harbor areas have fish markets affiliated with them. They could be listed at the Salmon Council's website, featured at promotions and the Salmon Council's brochures could be distributed at the markets. It would be appropriate to request that the markets sell no farmed salmon during California's salmon season.

• Partner with tourist sites at harbors.

The major harbor areas (Monterey, San Francisco, Bodega Bay, Fort Bragg, even Half Moon Bay) are also prime tourist destinations. Their websites could be linked with the Salmon Council's, featured at promotions and the Salmon Council's brochures could be distributed at their markets, restaurants and bed-and-breakfasts.

- ♦ Investigate hosting groups from the Culinary Institute of America-Greystone and the California Culinary Academy at fishing ports.
- Work with a well-known California winery.

Many wineries now have a chef who puts on programs and dinners featuring their wines. It is important that the winery market only California wines, in order to reinforce the California origin. Many wines go with salmon; besides the traditional pairing with Chardonnay, recent recipes have featured salmon with a Pinot Noir, and even smoked salmon with Zinfandel.